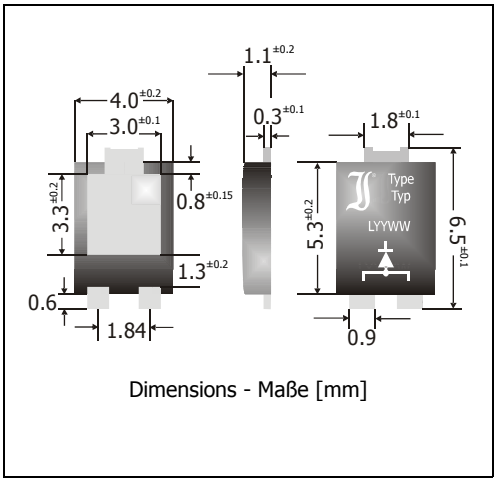
PPS1030 ... PPS1060

Surface Mount Schottky Rectifiers
Schottky-Gleichrichter für die Oberflächenmontage

Version 2014-08-18



Dimensions - Maße [mm]

Nominal Current Nennstrom	10 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung	30...60 V
Plastic case Kunststoffgehäuse	Power SMD
Weight approx. Gewicht ca.	0.1 g
Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert	
Standard packaging taped and reeled Standard Lieferform gegurtet auf Rolle	

Green Molding
Halogen-Free

Features / **Vorteile**

Optimized trade-off between V_F and I_R	Optimaler Kompromiss zwischen V_F und I_R
Compatible to industry standard packages	Kompatibel zu industrieüblichen Gehäusen

Maximum ratings and Characteristics / **Grenz- und Kennwerte**

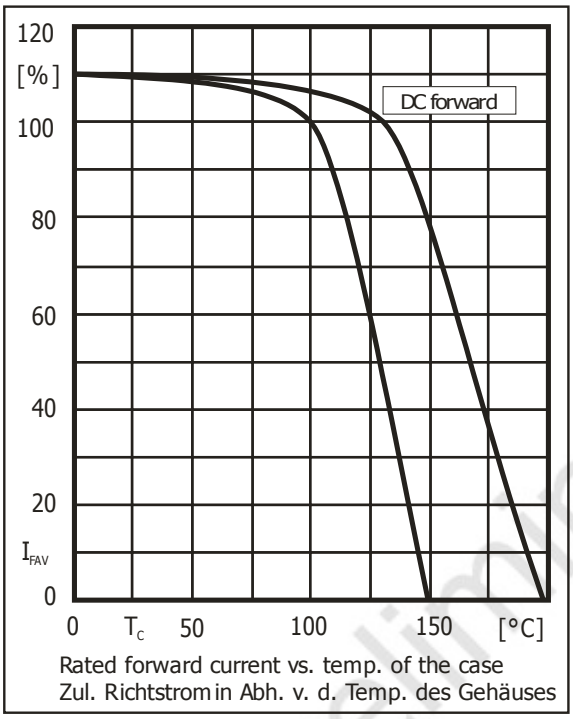
Type Typ	Repetitive / Surge peak reverse voltage Periodische- / Spitzen-Sperrspannung V_{RRM} [V] / V_{RSM} [V]	Forward Voltage Durchlass-Spannung V_F [V] T_j = 125°C	Forward Voltage Durchlass-Spannung V_F [V] [1] [2]	
		I_F = 5 A	I_F = 5 A	I_F = 10 A
PPS1030	30	typ. 0.31	< 0.44	< 0.49
PPS1040	40	typ. 0.31	< 0.44	< 0.49
PPS1045	45	typ. 0.31	< 0.44	< 0.49
PPS1050	50	typ. 0.45	< 0.51	< 0.63
PPS1060	60	typ. 0.45	< 0.51	< 0.63

Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last		T_C = 100°C	I_{FAV}	10 A [2]
Repetitive peak forward current	PPS1030 ... 1045	f > 15 Hz	I_{FRM}	50 A [2]
Periodischer Spitzenstrom	PPS1050 ... 1060			40 A [2]
Peak forward surge current, 50/60 Hz half sine-wave	PPS1030 ...1045	T_A = 25°C	I_{FSM}	250/275 A [2]
Stoßstrom für eine 50/60 Hz Sinus-Halbwelle	PPS1050 ... 1060			220/250 A [2]
Rating for fusing, t < 10 ms	PPS1030 ... 1045	T_A = 25°C	i^2t	310 A^2s [2]
Grenzlastintegral, t < 10 ms	PPS1050 ... 1060			240 A^2s [2]
Junction temperature – Sperrschichttemperatur ... in DC forward mode – bei Gleichstrom-Durchlassbetrieb			T_j T_j	-50...+150°C ≤ 200 °C [3]
Storage temperature – Lagerungstemperatur			T_S	-50...+150°C

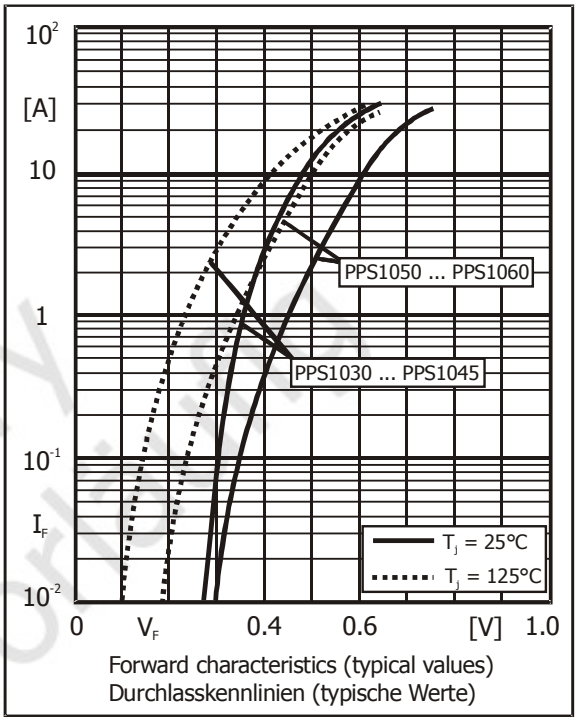
1 T_j = 25°C
2 Both anode pins connected – Beide Anodenanschlüsse kontaktiert
3 For more details, ask for the Diotec Application Note "Reliability of Bypass Diodes"
Weitere Infos in der Diotec Applikationsschrift „Reliability of Bypass Diodes"

Preliminary
Vorläufig

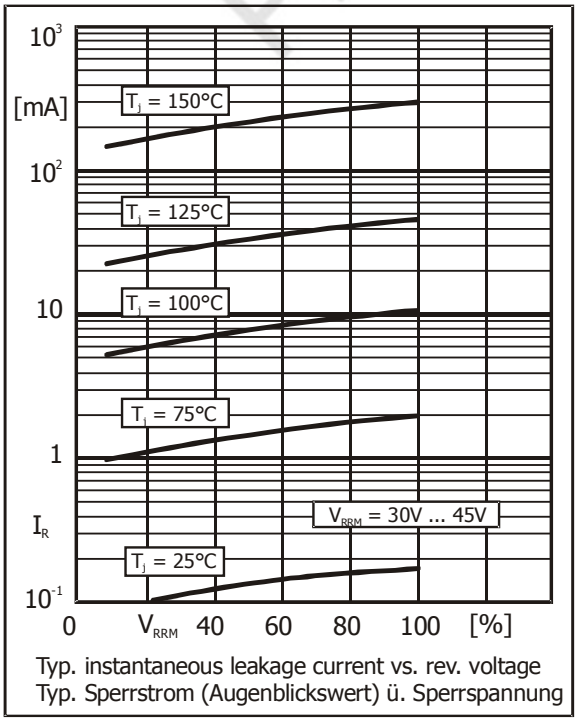
Characteristics				**Kennwerte**
Leakage current Sperrstrom	T_j = 25°C T_j = 100°C	$V_R = V_{RRM}$ $V_R = V_{RRM}$	I_R I_R	< 300 µA typ. 10 mA
Thermal resistance junction to case Wärmewiderstand Sperrschicht - Gehäuse			R_{thC}	< 2.0 K/W
Typical Junction Capacitance Typische Sperrschichtskapazität		V_R = 4V	C_J	800 pF



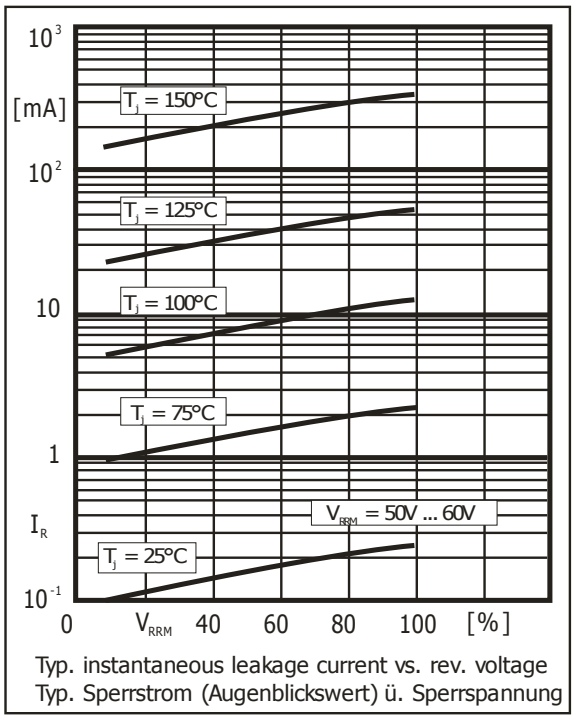
Rated forward current vs. temp. of the case
Zul. Richtstrom in Abh. v. d. Temp. des Gehäuses



Forward characteristics (typical values)
Durchlasskennlinien (typische Werte)



Typ. instantaneous leakage current vs. rev. voltage
Typ. Sperrstrom (Augenblickswert) ü. Sperrspannung



Typ. instantaneous leakage current vs. rev. voltage
Typ. Sperrstrom (Augenblickswert) ü. Sperrspannung

Preliminary
Vorläufig

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